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EVALUATION REPORT

OF THE

CAPITAL IMPROVEMENT DEPARTMENT

Prepared for:

City of El Paso

October 19, 2015

Prepared by:

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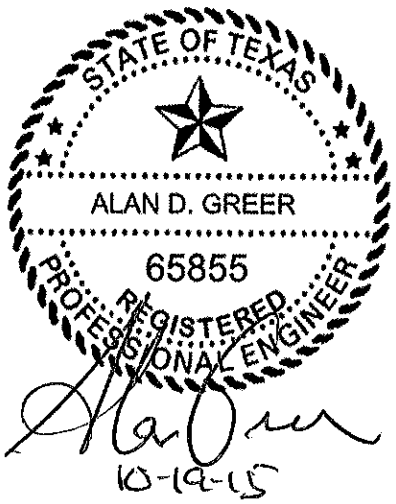

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EXECUTIVE SUMMARY

BACKGROUND

The City of El Paso (COEP) Capital Improvement Department (CID), formerly Engineering Department, has had a history of delivering capital projects valued on average of $20-50 million per year. In 2012, the COEP voters undertook a much larger, unprecedented public investment by approving a Bond Program consisting of $218 million in Street Improvements and $473 million in Quality-of-Life infrastructure. Furthermore, the COEP undertook additional TxDOT/MPO/Federally funded projects for a total value of $1.28 billion. The new bond programs stressed the existing engineering staff's capacity and included a large variety of types of projects. The Quality-of-Life program included a series of highly complex projects and the use of alternative project delivery methods including Construction Manager-at-Risk and Design/Build project delivery. Neither the size of the department's staff, nor the staff's expertise with facility projects using alternative delivery processes, changed appropriately with the new program.

Other legacy issues related to the department's lack of adequate processes became increasingly apparent as the department struggled with the new program. Those legacy issues included a lack of standard practices for traditional project delivery, scope development, project estimating; ineffective communication, coordination with other City departments and agencies, use of Architectural/Engineering consultants during construction; and a culture of appeasement by key positions which jeopardized projects. These issues lead to a gradual decline in the department's ability to deliver capital projects.

As part of the analysis, Freese and Nichols, Inc. (FNI) interviewed City employees and external stakeholders in late July and early August 2015 and noted several critical barriers to success. Several of those barriers include:

- Few standardized tools for project managers to plan, monitor and document capital projects
- Limited formalized training for employees
- Lack of protocol for communication from the project managers to division managers to directors and City leadership
- Lack of protocol for handling concerns from the public or City Council representatives
- Lack of a clear process for managing changes, or inclusion of Architect/Engineer of record during construction
- Legacy deficiencies inherited by the department including projects that were either not properly budgeted or whose scopes were changed without budget adjustments

It is apparent that the project managers seem to work diligently to resolve problems on projects. Additionally, stakeholders noted that the department has explored multiple ways of improving communications with the public and they have improved. The recent reorganization with the creation of the CID is one of many steps that are required for the department's success.

Despite noted deficiencies, there are important successes which should be allowed to continue and replicated. FNI found that many of the project managers have a great deal of potential and, with more support and leadership within the department, could be successful. FNI recommends that the COEP expand the philosophy of embedding "Project Sponsors" in user departments and the use of program management services to execute specific capital projects or programs. FNI further recommends the CID continue seeking training and greater understanding of the inter-workings and project delivery with TxDOT, MPO, SunMetro and internal departments. However, if the COEP's CID is to improve its ability to

successfully deliver projects, then the department must be better structurally aligned and augmented with third-party resources to fill identified personnel gaps that will help with traditional and alternative delivery methods. Below are the recommendations and implementation plan to address these issues.

RECOMMENDATIONS

Based on the evaluation, FNI recommends several short- and long-term actions as follows:

Capital Improvement Department (CID) Management

- Evaluate the qualifications, duties, and workloads of individual employees and make necessary adjustments and changes
- Contract with third-party program management firms for specific non-traditional projects and to increase capacity of the department

Organizational Effectiveness

- Reorganize the CID to a flatter structure which is better aligned with other Public Works functions:
    - Engineering/Capital Improvements
        - CIP Planning Division
        - CIP Design Division
        - CIP Construction Division
        - Traffic Engineering Division
    - Streets/Facilities Maintenance
        - Streets Division
        - Fleet Division
        - Facilities Division
    - Relocate staff into the User Departments in the role of Project Sponsors

CIP Delivery Process Improvements

- Develop standard project controls and resources to manage project scope, schedule and budget
- Implement process improvements for project planning and change management during both design and construction

Communications

- Implement process improvements detailed for communication
- Develop a public communications plan for the capital projects

Quality Control

- Develop a QC team and process
- Develop an independent design and constructability review process with checklists
- Develop a document control process

- Review and make necessary changes to Architectural/Engineering selection and standard contract documents
- Develop processes for utility coordination

90-DAY IMPLEMENTATION PLAN

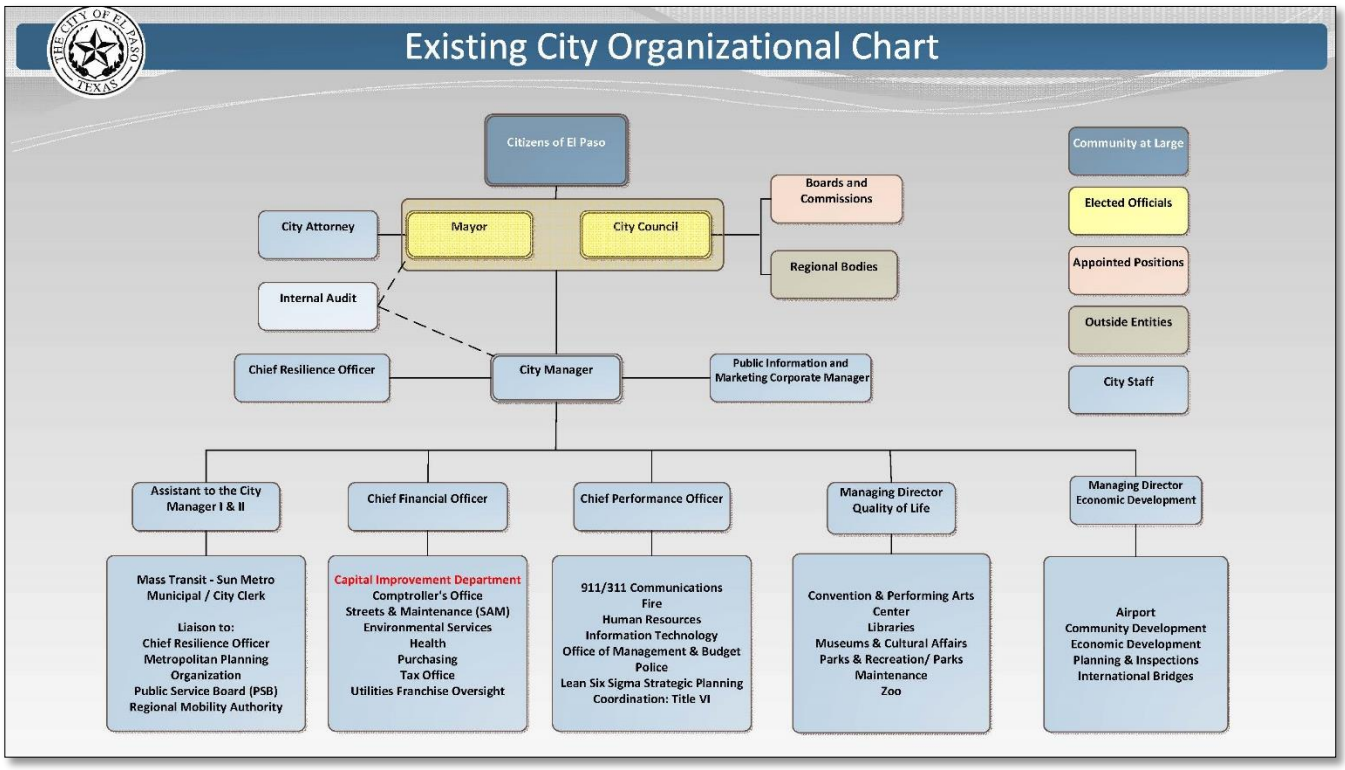
The following is a summary of some of the key actions that should be implemented over the next 90 days:

- Develop and implement process improvements for Project Planning, Communication, and Change Management during Construction
- Hire third-party program management for specific defined areas of the CID organization
- Perform holistic assessment of all projects that are currently underway
- Implement interim project tracking and reporting processes and evaluate current project schedules and budgets.
- Define and implement a new public relations plan
- Define strategy for long-term process improvements within CID
- Engage the Engineer and Architect of Record during the construction phase of projects
- Develop a City liaison process to coordinate with franchise utilities and El Paso Water Utilities (EPWU)

1.0 INTRODUCTION

The COEP has contracted with Freese and Nichols, Inc. (FNI), an engineering company with experience and expertise in assisting Texas Municipalities, to perform a third-party objective evaluation of the CID as it relates to the delivery of capital improvements. With the voter-approved 2012 Quality of Life Bond Program, CID has had significant changes to both quantity and type of projects to manage and deliver. The CID was recently assembled and includes a combination of Transportation Planning, Parks, Streets, Traffic and Engineering staff. This change was an effort to add more resources for implementation of the Capital Improvement Program (CIP), the street improvement program, and to provide greater service to End Users (Other City Departments) for the delivery of their infrastructure projects. The following Citywide organization chart identifies the current relationship of the CID within the City Organization.

Figure 1-1: Existing City Organizational Chart



The CID provides services to deliver projects within the current COEP CIP. For this evaluation, FNI understands that the following projects, as identified in the "Quarterly Report Spring 2015," are to be delivered:

Street and Road Improvements	**$218.4 Million**
Quality of Life Projects	**$473.3 Million**
TxDOT & MPO Projects	**$587.0 Million**
Total	**$1.28 Billion**

1.1 EVALUATION PROCESS

For this process, internal and external stakeholder data is gathered and measured against best management practices within other municipalities. Organizational effectiveness, project delivery processes, communications, and quality control are all areas of opportunity that were identified and evaluated. This study is a 45-day quick snapshot in time to identify actionable items for immediate implementation and for long-term process improvements and cultural changes within the CID.

The following was performed for the evaluation:

- Interviews – FNI conducted group and individual interviews to gather information regarding existing policies and procedures, staffing availability, organizational structure, communications (internal and external), and the overall management process. Staff from the following departments, groups, and agencies were interviewed: City Manager, Chief Performance Officer, Chief Financial Officer, Internal Auditor, Public Information Marketing Manager, Quality of Life Managing Director, Capital Improvement Director, Parks and Recreation Director, Purchasing Director, Library Director, Project Managers, Division Managers and external organizations such as El Paso Water Utilities, TxDOT, MPO, Engineers (ACEC) and Architects (AIA).
- Review of existing data and documentation – FNI reviewed the available information regarding contracts, internal procedures and processes, organizational structure and the information provided by the City regarding scopes, schedules, and budgets for capital improvement projects. Specific project information as it relates to metrics such as budgets, schedules and estimates was not readily available for review.
- Analysis – Based on the information from the data and interviews, FNI performed analysis regarding program controls and systems processes including: schedules, budgets, design/construction management, land acquisition, communication, document control, and coordination with other agencies. Additionally, FNI reviewed staffing availability and organizational structure as it pertained to long-term successful delivery of capital improvement projects.
- Gap analysis – FNI compiled the data obtained and performed a gap analysis. Every identified opportunity for a new process or process improvement that would enhance efficiency within the organization was considered a “gap.” This report identifies the opportunities for improvement, based on the “gaps” and best practices used by other comparable Cities.
- Recommendations – FNI proposed recommendations and a 90-day implementation plan to enhance the CID’s ability to execute the CIP projects.

1.2 OPPORTUNITIES FOR IMPROVEMENT

Based on the analysis of the data provided, several 'gaps' and opportunities for improvement were identified. The following list is a summary of the opportunities put into three manageable categories for recommendations.

A. **Departmental/Management**

1. Decision Making
2. Organizational Management
3. Mentoring staff
4. Training staff
5. Workload Distribution
6. Leadership Transition
7. Processes to execute a CIP
8. Staff training on the project delivery system
9. Plan for top down and bottom up communication
10. Presentation skills – to communicate status of work
11. Developing a culture of trust and respect

B. **Communications**

1. Communication from CID management to CM
2. CID communication from Division Managers to PMs
3. CID communication with User Groups
4. Updates to CM
5. Updates to City Council
6. External communication with Stakeholders

C. **Processes**

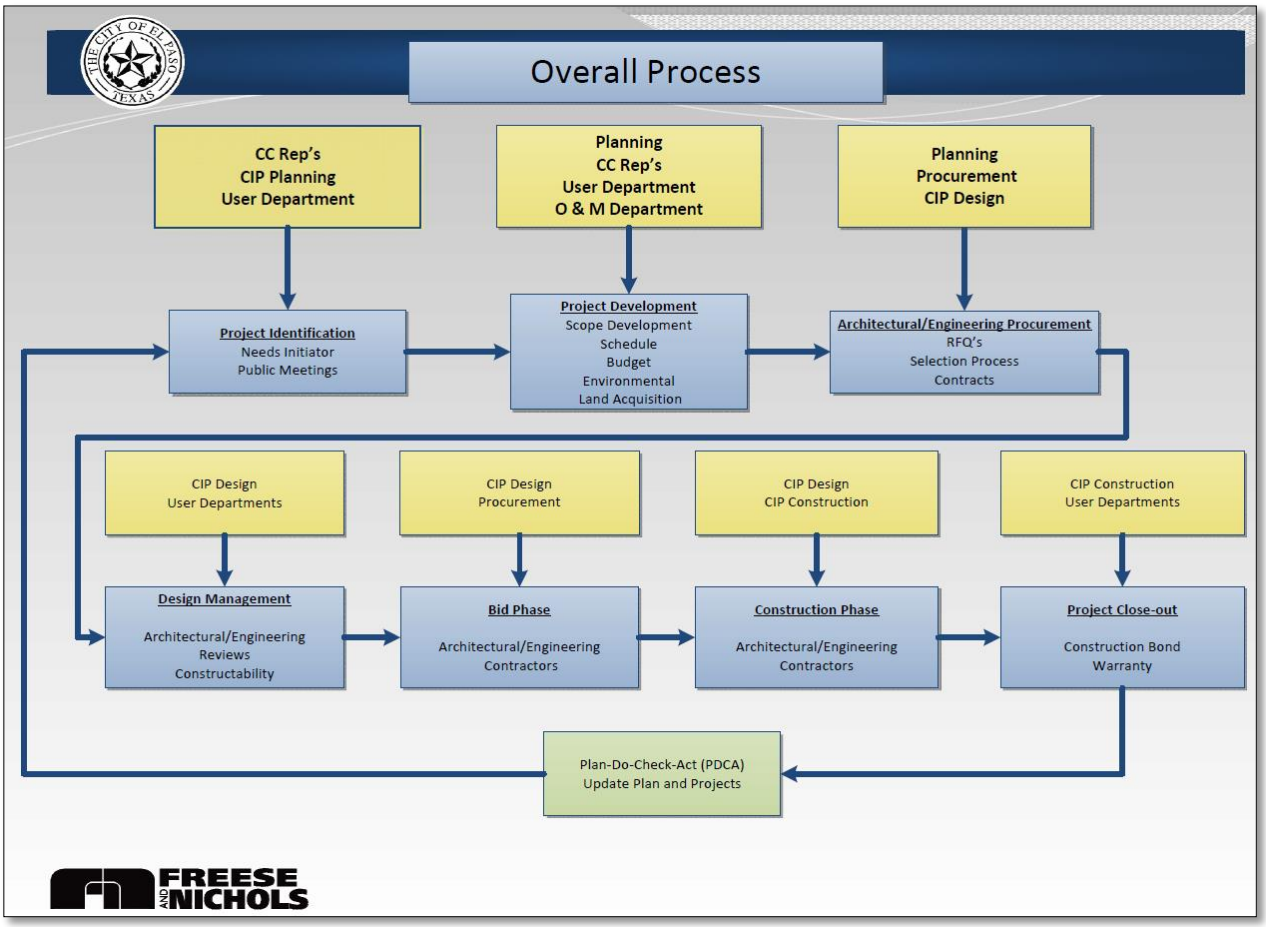
1. Project Planning
2. Cost Estimating
3. Project Scheduling
4. Internal project meetings and coordination
5. External public meetings
6. Stakeholder communication
7. Budget and Schedule Management
8. Use of Architect/Engineer-of-Record during construction

2.0 PROCESS IMPROVEMENT

Continuous process improvements are the core of efficient and effective project delivery. The overall CIP delivery process is outlined in Section 2.1. For this analysis, FNI used results to determine that the critical processes to analyze in further detail are Capital Improvement Project Planning, Communication, and Capital Improvements Construction Change Management.

2.1 OVERALL CAPITAL IMPROVEMENT PROJECT DELIVERY

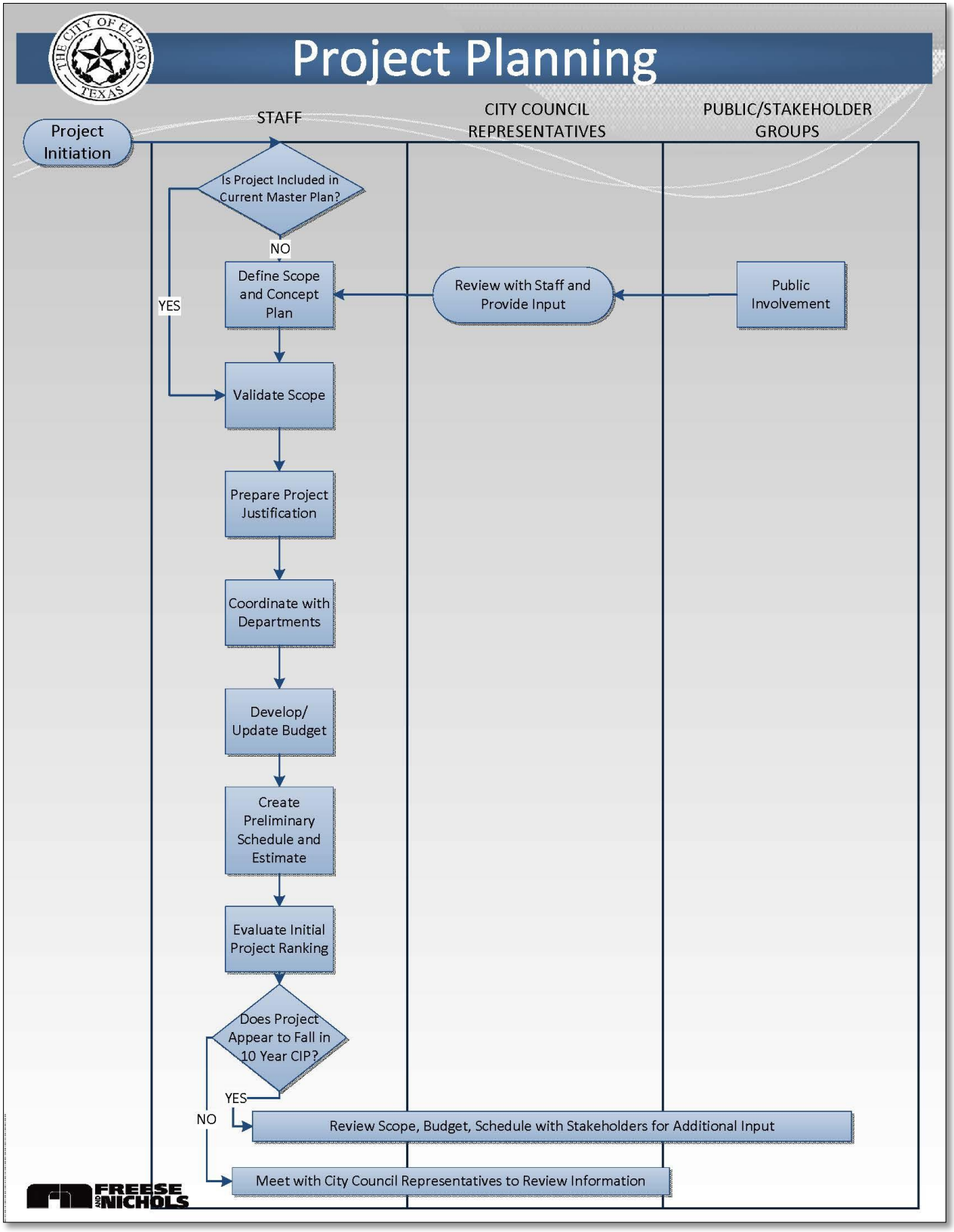
A core competency of the CID is to understand the overall CIP delivery process which involves project planning, design and construction. The overall process should be more detailed and will be developed over time. To outline this process we have developed the following simplified flowchart, which can be further refined as improvements are made within CID.



2.2 CAPITAL IMPROVEMENT PROJECT PLANNING

This section provides a detailed description of the project planning process as well as a discussion on roles and responsibilities. The project planning flowchart shown as Figure 2-1 illustrates the process from project initiation to the point that design may begin.

Figure 2-1: Project Planning



2.2.1 Project Initiation

The project may be initiated by staff based on a master planning effort or in response to an occurrence such as a natural disaster, excessive maintenance or a failure of some sort. Additionally, a project could be initiated by a City Council Representative based on knowledge of their district needs or through the input from their constituency. The general public or stakeholder groups may also initiate a project to address a concern or need in the community. When a project is initiated by a party other than staff, it is assumed that communication of the project request is coming to staff via the City Manager's office or a Department Director.

2.2.2 Process Steps

Once a project is initiated, staff will verify the project scope. If the project is in the current master plan, a simple validation process is all that will be necessary. If the project is new or is not included in a current plan, the project elements will need to be defined. Using the information provided by the project initiator, staff will draft a detailed project scope clearly identifying components. This draft scope will be presented to the initiating party for their input and approval.

Upon agreement on the draft scope, staff will prepare a project justification statement which will explain the linkage to the city's strategic plan and/or other planning documents. If the project was initiated in response to an occurrence, the documentation will include information as to how the proposed project addresses or responds to the issue.

Staff will then meet with other COEP departments to review the project scope and justification to verify that all necessary components are properly addressed. There may be opportunities to combine projects between departments for economy of scale and to limit disruption during construction activities. There may also be outside entities, such as franchise utilities, that should be contacted during this stage. As franchise utility companies are most often on the critical path, it is never too early to open lines of communication. Additionally, staff should inquire as to potential barriers or cost prohibitive conflicts that may exist in the project area.

A draft budget is prepared which incorporates all of the project elements as well as known outside costs. If the project is initiated from a current master plan, the budget should be thoroughly reviewed and adjusted to current dollars. Contingencies to address unknowns should be factored in as well as right-of-way needs.

Estimating the amount of time needed for design, approvals, and construction is another critical element to project planning. At this level, basic time blocks typically include Design, ROW Acquisition, Bid and Construction phases. Additionally, adequate time for reviews — by the City and other regulatory authorities — is absolutely critical to development of a realistic timeline.

Based on the information developed at this point, staff will evaluate the project to determine whether it falls within the 10-year planning horizon. This can be most effectively done using a CIP prioritization methodology being developed and approved by city leadership. If the project appears to fall within the current CIP, staff will meet with the project initiator to review the information and the proposed timeline for implementation of the project. It would also be an appropriate point in the process to meet with neighborhood or stakeholder groups to review the project plan. Any additional input should be documented and updated as needed before setting a timeline for beginning the design process.

If the project does not fit within CIP, a meeting is necessary with the project initiator to review the details and explain the ranking. The project initiator may take action to communicate information with the public

regarding the projected timing of the project and the city's priorities, explaining why the project is not going to proceed in the short term. Once the timing of the project falls within the CIP, the budget needs to be adjusted for anticipation cost escalation, if appropriate.

Table 2-1: Responsibility Matrix

Action	City PM	City Council Rep	Public/Stakeholder Group
Initiate Project	Create	Create	Create
Scoping	Responsible	Review	Input
Project Coordination	Responsible		
Budget/Schedule	Responsible		
Project Implementation Plan	Responsible	Review	Receive information

2.3 CID COMMUNICATION PROCESS WITH USER GROUPS

Effective communication, internally among City staff as well as to outside groups, is a critical component of a successful capital improvement program. Stakeholder groups such as TxDOT, franchise utility companies, the MPO and many others play vital roles in the on-time and on-budget delivery of most capital projects. Residents and business owners are impacted by construction activities and need to be aware of project schedules and phasing. Sponsor groups within the City are responsible for startup and operations related to capital projects, as well as reviewing construction documents as the design progresses. COEP leaders and City Council representatives need to be informed and understand the process for obtaining and sharing information with City Project Managers. Essentially, it is the role of the City Project Manager to facilitate timely and appropriate communication with all of these groups and individuals. The following sections describe a systematic approach to CIP communications that could be implemented within the COEP.

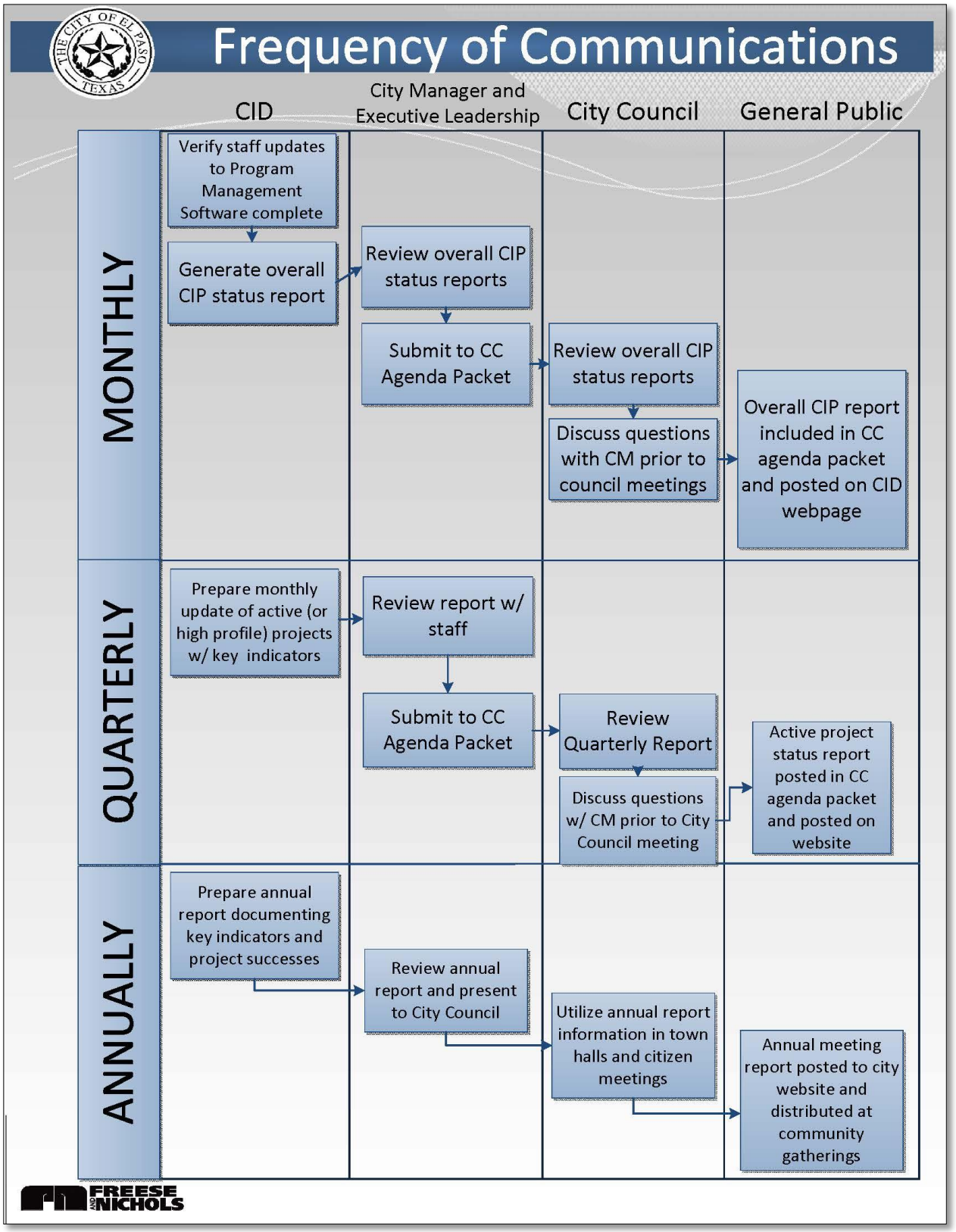
2.3.1 Data Management

Foundational to effective communication is data management. The information that needs to be communicated must be accurate and available to those responsible for the communication. Large CIP programs require the use of a centralized project management software for data management. Software typically utilized will include online access that can be customized for various groups to provide on-demand status reports. Some software packages even facilitate public information feeds to city websites and social media outlets, further enhancing the City's communication efforts.

2.3.2 City Council Communication

The City Council representatives provide a vital link between staff and the community. The flow of information in both directions can be enhanced by the Council Reps. The following is a communication process chart that may be implemented:

Figure 2-2: Frequency of Communications



2.3.3 Internal City Staff Communication

systematic approach to internal staff communications can improve workflow, coordination and accountability. The CID Director should form a leadership team comprised of the managers over critical areas of their organization. This "lead team" will meet weekly to review project performance and delivery issues. The meeting should be limited in time and scope but can also address strategic issues with effective meeting planning. Questions from City Council to the City Manager should be reviewed to look for opportunities to improve reports and staff operations.

Each manager should institute a weekly "stand-up" type meeting with his or her group after the lead team meeting. This quick format meeting can be utilized to relay information from the manager to staff as well as to instill some accountability among project managers as they report on the status of their projects in front of the group.

In order to facilitate and streamline communication between the City PMs and the sponsor/user groups, monthly meetings should be organized with standard agendas that include project updates. Again, these monthly meetings will help with accountability if issues are documented and tracked forward for resolution.

In addition to regular project meetings led by city PMs and their consultants, the CID department should establish monthly meetings with outside stakeholder groups. The most common example of this type of meeting is a monthly franchise utility meeting where outside utilities can learn the status of projects and discuss issues with City PMs.

2.3.4 Public Communication

The City Council reporting process outlined in previous sections will provide regular and timely updates on overall project statuses to the citizens and business leaders in the community. For some projects, this may provide adequate information to the general public. However, complex or high-profile projects will require a more extensive public engagement plans and should be developed for each individual project. This public engagement plan should be prepared by the design consultant with input from the City PM. Prior to implementation, the City PM should present the public engagement plan to city management for feedback and approval. An outline of the plan should be included in the initial project status reports so that City Council is aware of the plan.

2.4 CAPITAL IMPROVEMENTS CONSTRUCTION CHANGE MANAGEMENT

2.4.1 Purpose and General Description

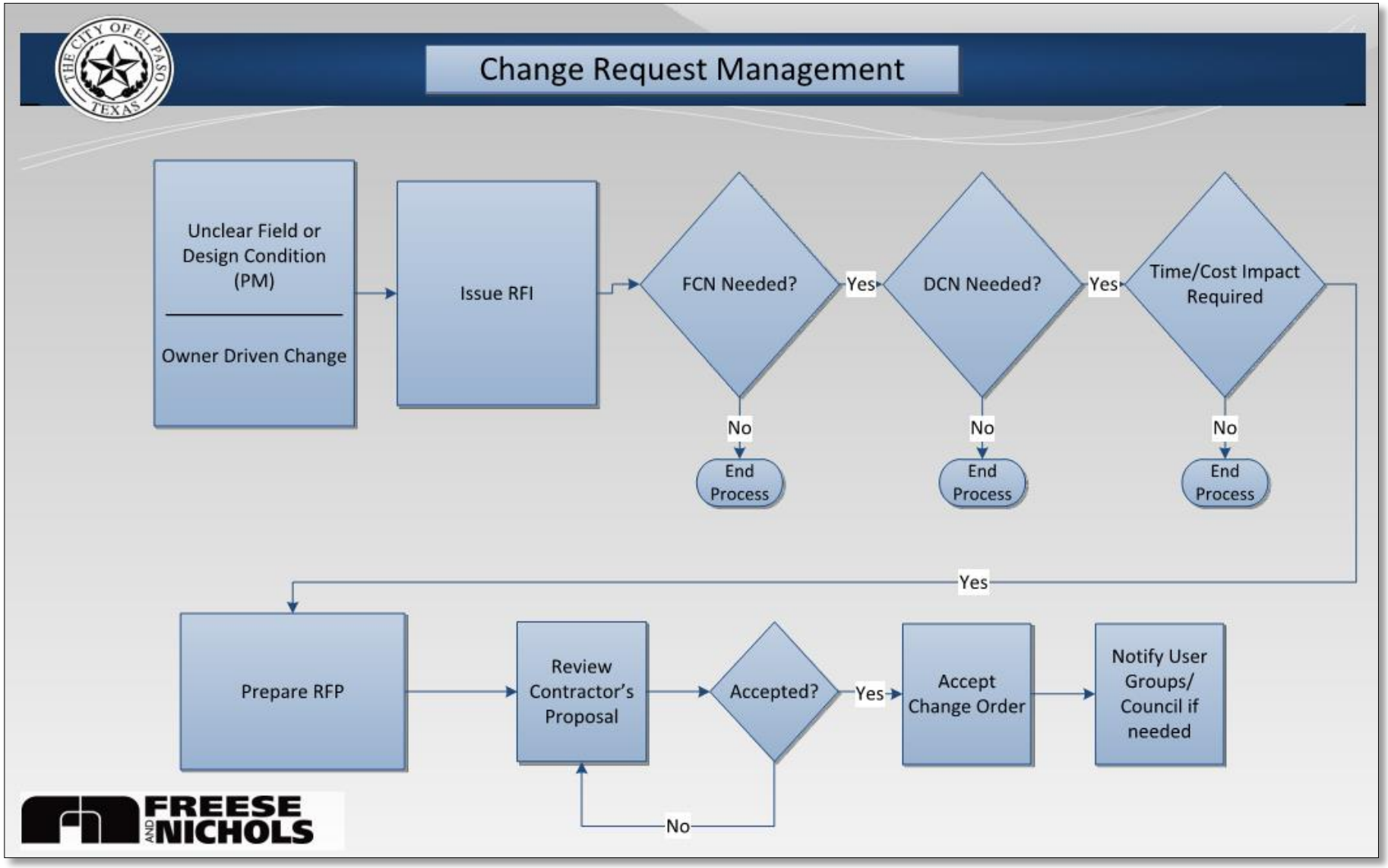
The purpose of this procedure is to provide guidelines for the management and control of any changes required to the original project scope. During construction work, deviations from the scope and contract documents are sometimes necessary. These deviations need to be recognized, documented, and tracked at the earliest possible moment so that the potential cost and schedule impacts can be kept to a minimum.

Changes can be introduced to a project at any time. Although the change does not always result in a Change Order, the documents associated with the change still need to be recorded in a Project Management System (PMS). These change information documents are:

- Request For Information (RFI)
- Design Change Notice (DCN)
- Field Change Notice (FCN)
- Request For Proposals (RFP)
- Request For Change (RFC)

The diagram on the following page shows the normal relationships between issuance of the various change related documents as well as the general process flow.

Figure 2-3: Change Request Management



Request for Information (RFI) with an Answer (ANS)

An RFI is issued when there is a project-related question that requires documented clarification. An RFI can be initiated by the contractor and usually is addressed by the Architect/Engineer of record but the Program Manager (PgM) or PM can also answer it. Based on the Answer to the RFI a change notice can be issued or the RFI can be closed out.

Design Change Notice (DCN)

A DCN is issued by the Architect/Engineer of record. The notice is created whenever a change is needed to the specifications or drawings.

Field Change Notice (FCN)

An FCN is issued when there is a deviation from the contract scope due to site/field conditions. This can be from an unforeseen field condition.

Potential Change Initiated by a RFP – Request for Proposal

The City may want to know how much additional work would cost and will issue an RFP to the contractor. In response to the RFP, the contractor will submit an RFC. The PgM will create an independent estimate of the RFP for comparison by the Change Order Review Committee.

2.4.2 Policies Associated with Construction Change Management

The PM will hold prime responsibility for the change control process. The City Planning staff in CID will have unrestricted access to all project schedule information, for the purpose of ensuring compliance with the schedule review program, audit considerations, and verification of process conformity.

2.4.3 Change Management Review and Approval Process

This section provides a detailed description of the process for each of the change management documents as well as a description of the roles and responsibilities. In general:

A. PM Responsibilities

- Manages the entire change management process
- Maintains records and updates schedules
- Handles all administrative tasks
- Makes sure that changes are properly set up and linked in PMS or project file
- Creates FCN and RFPs (for review)
- Manages the change order log

B. Request for Information (RFI)

The contractor usually sets up an RFI whenever more information or clarification is required regarding any aspect of the work to be done. The intent in formalizing the request for information is so that the answer can be documented and become part of the project documentation. In some instances, the RFI will bring out a deficiency in design, and eventually result in a Request for Change. The following steps represent the general RFI execution process:

1. If the City PM can answer the question, the answer is logged into PMS with the RFI closed.
2. If the question cannot be answered by the PgM or PM, the RFI is forwarded to the Architect/Engineer to be answered.

3. The Architect/Engineer logs the answer in PMS and closes the RFI. The answer is then returned to the requestor, including a determination on whether or not a DCN is needed. If it is, the Architect/Engineer initiates the DCN.

2.4.4 Design Change Notice (DCN)

The Architect/Engineer creates a DCN in PMS whenever there is a need to modify or clarify any aspect of the design. Only the Architect/Engineer of record is authorized to create a DCN. It must include the complete scope of the notice; why it is being created; the expected impact on the schedule; the additional or reduced costs that can be expected in terms of labor, materials, and equipment usage; and any other project impacts associated with the change.

1. Architect/Engineer creates the DCN.
2. The PM reviews the DCN and distributes it to the impacted contractor, as well as to the Change Order Committee members.
3. The DCN is reviewed and a determination is made on whether or not there is a schedule, resource, or cost impact. If there is an impact on at least one of these, the committee agrees to issue Request for Proposals to the General Contractor.
4. If there is no impact on the schedule, resources or costs, the PgM forwards the DCN to the contractor and changes the DCN status and Issue status to Closed.

2.4.5 Field Change Notice (FCN)

A Field Change Notice is issued whenever there is a field condition that was not previously anticipated, such as excavation work encountering unforeseen field conditions or environmental assessment work not previously planned because the situation was not known until work began. The FCN is also sometimes used as a means for the project manager or construction manager to set an interim direction for the construction crew while an unexpected situation is being evaluated.

Emergency FCNs

In emergency situations (i.e. situations where work is being hindered or stopped by the situation and the contractor does not have direction on how to proceed), the PgM or City PM would recommend a direction to take, incorporate that direction into the FCN, and review it with the Contracting Officer and/or Contracting Officer's Technical Representative (COTR), as appropriate (the CO reviews it if there are potential contractual implications). All emergency FCNs must have PM / COTR approval.

The Emergency FCN is considered to be a stopgap measure. Once the emergency situation has been addressed, the FCN then passes through the normal, non-emergency process (see below).

Non-Emergency Situations

For non-emergency situations, PgM or City PM forwards the FCN to the contractor for review. The contractor assesses whether or not there is any cost or time associated with execution of the field change. If so, the contractor uses the FCN details as a basis for creating a Request for Change. If there is not, the FCN is closed.

2.4.6 Prepare Request for Change (RFC)

A. Requests for Change can result from any of the following trigger events:

1. A DCN or FCN has been issued and the contractor feels that there will be a resulting impact on schedule, resources, and/or cost.
2. The contractor feels that certain work is out of scope or that contract obligations from other parties are not being met, the contractor may issue an RFC.
3. The Change Order Review Committee has authorized an RFP, to which the contractor would respond with an RFC.

B. The steps in the RFC process are as follows:

1. The RFC is created by the contractor and forwarded to the PgM. In completing the RFC, the contractor must complete the justification, scope, costs, and schedule impact. The PgM reviews the RFC for validity, confirming the following:
   a. The request is for out-of-scope work
   b. The out-of-scope work needs to be done
   c. The request makes sense
   d. Any reasonable alternatives have been examined
2. The PgM submits its written, detailed recommendations, as applicable, to the City PM within seven calendar days of receiving the RFC from the GC. In doing so, the PM:
   a. Verifies the sections of the specifications and/or drawings impacted by the change.
   b. Verifies the type of change involved (e.g. construction, errors and omissions, scope change, etc.).
   c. Determines whether addenda to specifications and/or revisions to drawings are necessary to construct, inspect, and accept the changed work.
   d. Determine whether material submittals are required from the contractor.

2.4.7 Evaluate Change Request

A. An RFP is issued whenever City is considering making a change to the approved project scope, but needs to understand the cost, schedule, resource, and other impacts to the project prior to making a final decision. The steps in processing an RFP are as follows:

1. The City PM completes request in as much detail as is known.
2. The Project Manager schedules a review of the RFP with the Change Order Review Committee.
3. The Committee reviews the RFP to assess:
   a. Is the change order required?
   b. Is it necessary to make the scope change or change order?
   c. Will the schedule absorb the time impacts?
   d. Will the project be able to handle the associated costs, if any? Determine funding availability.
   e. Negotiate with all parties if approved.

3.0 RECOMMENDATIONS

The recommendations provided in this section are based on the analysis and the Opportunities for Improvement outlined in Section 1.2. In addition, the recommendations have direct linkage to the Goals identified in the COEP Strategic Plan. The short-term recommendations have been shown in the 90-day Implementation Plan in Section 4.

3.1 CID MANAGEMENT

Recommendation 3.1.a: **Develop, repurpose, hire or outsource key leadership and management positions for the CID organization.** This would include the Managing Director, Directors, and Division Managers at a minimum. The critical management roles are the foundational leadership roles to build up the CID organization. The following attributes should be considered when filling the critical management positions in the proposed Public Works organization:

1. Ability to evaluate all perspectives of a situation, obtain necessary data and make timely decisions.
2. Ability to present technical issues to Staff, City Representatives, and the Public in a clear, logical and understandable manner.
3. Establishes trusting relationship with the Community, TxDOT, MPO, Architectural/Engineering Consultants, and other entities.
4. Understands the keys for a successful project manager by identifying talent and rewarding the right personnel when a job is well done.
5. Leads by example and works very closely with management, the PMs, and other staff by holding weekly or bi-weekly meetings to review project metrics.
6. Works with the PMs and the Managing Director of Public Works to develop specific project metrics.
7. Ensures that the PMs and other staff have the right tools to do their job.
8. Ensures that proper procedures are in place to design and construction a project.
9. Holds staff accountable for their decisions and provides direct reports the proper authority to effectively manage their job.
10. Mentors staff to develop the skills necessary for their roles. Helps the project managers who need to be guided and mentored throughout the process.
11. Trains staff as needed in engineering and construction management.
12. Possesses a strong technical and management background with municipal CIP program delivery for large public infrastructure design and construction.

Recommendation 3.1.b: **Evaluate existing management and critical staff and make appropriate staff position changes.** Determine whether existing management or other internal candidates have the ability and experience to meet the desired results and outcomes for leadership in a Public Works organization. Our current evaluation indicates that changes need to be made.

Recommendation 3.1.c: **Contract with a third-party Engineering and/or Program Management firm to provide program management services for the following defined programs:**

- Street Reconstruction Program
- Quality of Life Program
- TxDOT/MPO and Federal Transit Programs

The program management firm(s) will provide overall leadership, processes development, project management, and train the City staff for a specified period of time until improvements in project delivery are achieved. Using third-party outside resources will offer the Public Works organization several key benefits to improve delivery of the CIP:

1. Outsourcing of resources allows the CID to move more quickly than a hiring process.
2. Multiple key leadership positions can be filled.
3. Staff augmentation through outsourcing allows current high-performing staff to become engaged in the changes, move into new and better matched job positions, and lets the third-party fill key needs within the organization.
4. Outsourcing resources allows the CID flexibility to increase or reduce staffing to meet the changing demands and specific disciplines of work.

3.2 ORGANIZATIONAL EFFECTIVENESS

The effectiveness of an organization depends on getting the right people into the right roles. In this evaluation, FNI reviewed the organizational structure and recommends several changes to better align with operations. These changes can give staff direct roles and responsibilities that will empower them to succeed and rebuild trust within the organization. The organizational chart shown below is proposed to improve effectiveness. Based on this organizational change, the following recommendations should be implemented:

Recommendation 3.2.a: **Flatten the vertical organization by creating management opportunities and project teams under the Division Managers that have the key technical skills for the proposed areas of responsibility.** The determination on the use of project teams and third-party program management, as outlined in 3.1 above, will be decided by the Managing Director and Director positions. Flattening the organization to eliminate vertical bottlenecks is key to organizational alignment and efficiencies.

Recommendation 3.2.b: **Conduct an internal management teamwork retreat and develop a strategy for rolling out the new management team structure, process improvements and communication enhancements to be implemented.** It is important that the new Public Works organization and other city departments meet to establish expectations moving forward.

Recommendation 3.2.c: **Create the Engineering/Capital Improvements Department that provides engineering, project management, and construction management to execute the CIP.** The director of this department shall be a professional engineer. Each of the Division Managers shall develop an

integrated organizational plan within their respective Divisions, which will be aligned by project types to perform the functional tasks listed below:

- CIP Project Planning Division
    - Responsibilities:
        - Project Development
        - Project Controls: Scheduling and Cost Estimating
        - User Department Coordination
        - Complete Streets
        - Landscaping
    - Staffing:
        - Professional staff, Planners (AICPs), Engineers (EITs, PEs), GIS Analysts, Landscape Architects (RLAs)
- CIP Design Division
    - Responsibilities:
        - Architectural/Engineering design oversight
        - Project/Program Management
        - Design Standards/Specifications
    - Staffing:
        - Professional staff, Engineers (EITs, PEs), Architects (AIAs), Project Managers
- CIP Construction Division
    - Responsibilities:
        - Resident Project Representation (RPR)
        - Construction Inspection
        - Construction Scheduling
    - Staffing:
        - Professional &, field staff, Engineers (EITs, PEs), Construction Contract Administrators, Certified Inspectors
- Traffic Engineering Division
    - Responsibilities:
        - Minor Street modifications and parking
        - Traffic Calming
        - Traffic Studies & Planning
        - GIS/Pavement Management System
        - ADA compliance
    - Staffing:
        - Professional staff, Engineers (EITs, PEs, PTOEs), Architects (AIAs), Landscape Architects (RLAs)

Recommendation 3.2.d: **Relocate staff from the current CID Planning Division, and potentially other departments, back into User Departments to work in the role of Project Sponsors.** Each of the User Departments should have Project Sponsors that will develop needs, identify projects, produce concepts and work with the new Engineering/Capital Improvements Departments to oversee the projects through planning, design, construction and then into operation.

Recommendation 3.2.e: **Organize and relocate staff into a Street and Facilities Maintenance/Operations Division.** This division will at a minimum perform the following functional roles:

- Facilities Division
    - Building Maintenance
    - Minor Building Repair
    - Asset Management
- Fleet Division
    - Vehicles
    - Maintenance
- Streets Division
    - Signals, Signs, Street Light, Striping
    - Resurfacing Projects
    - Sidewalks, Alleys, Ramps
    - Staffing:
        - Engineers (EITs, PEs)
        - Project Managers
        - Inspectors

Recommendation 3.2.f: **Create a Director position to oversee the proposed outsourcing of the TxDOT, MPO and Federal projects to a Program Management (PgM) firm.** This director, and a potential assistant director, will manage the third-party contract with the PgM firm to design and construct these facilities.

Recommendation 3.2.g: **Relocate and supplement staff for a Public Works Administration Department.** This department will fully support the Public Works organization and performs functional roles such as:

- Public Works Admin
- Contract Preparation
- Architectural/Engineering and Construction Procurement
- Purchasing
- Accounting
- 311 Call Center

Recommendation 3.2.h: **Develop a communication plan to convey a phased approach to the organizational changes to internal staff and to the general public.**

Recommendation 3.2.i: **Prioritize a list of projects that are to be started for the Fiscal Year. Each project needs a schedule and budget. Any deviation, including adding and removing these projects from the list, will require upper management approval. Prioritize these projects based on technical merits**

3.3 CIP DELIVERY PROCESS IMPROVEMENTS

During FNI's evaluation, two root causes of delays, budgetary issues, construction overruns and poor communication became clear: lack of defined processes, and lack of resources and experience to deliver a large multi-disciplined CIP program. The lack of observed best practices, coupled with the lack of human and technological resources, has created many of the project delivery problems. Several process improvements have been identified and many more will still need to be evaluated and developed. The following recommendations address the critical CIP delivery processes that should be implemented:

Recommendation 3.3.a: **Develop common knowledge and education around the core function of the Public Works organization**. As identified in Section 2.1 above, the entire team should understand the goals, processes to deliver projects, and how it links to the overall strategic plan. This should be a core competency for management and staff in the organization.

Recommendation 3.3.b: **Use a third-party program manager to work with City Staff for developing a Project Management Plan (PMP) which documents processes and procedures to be used by the Public Works organization and all third-party program managers to manage and deliver the CIP.** The PMP will contain processes such as:

- Project Controls: Scheduling, Budgeting, Cost Estimating, Project Tracking, Reporting
- Risk Management
- Change Management
- Environmental Planning
- Land Acquisition
- Utility Relocations and Coordination
- Quality Control
- Public Relations Plan

Recommendation 3.3.c: **Implement the process improvements developed in Section 2 above for:**

- Project Planning
- Change Management during Construction

Recommendation 3.3.d: **Develop a CIP Schedule that identifies specific yearly activities necessary to execute the overall CIP.** The plan should parallel the COEP's strategic plan, yearly budget process, and other City/City Representative planning meetings. This schedule should be sustainable to allow for yearly updates and revisions to the CIP project and project activities.

Recommendation 3.3.e: **Evaluate and acquire Program Management software to use as a tool to manage and track CIP projects.** Utilize a third-party consultant to set up the system, customize desired reporting and train staff. Integration of software should consider programs used elsewhere in the City, such as PeopleSoft, Accela, and City Works. The use of a third party will minimize startup time and allow for targeted training on the customized system specifically established for the Public Works organization.

3.4 COMMUNICATION

Another root cause that became evident during the evaluation was the inconsistency and trust of the CIP communications. Communication between CIP Management and the project level is broken in both

directions. There is a lack of trust and confidence, and even a fear of communicating both positive and negative information. Processes must be improved to enable CIP's continuous and consistent flow of information within departments, to the CM, with City Representatives, to the local consultants and contractors, and to the public.

Recommendation 3.4.a: **Implement the process improvements developed in Section 2.3 above for Communication.**

Recommendation 3.4.b: **Use a third party, working with existing staff, to develop a public relations plan that includes internal and external communications**. Elements include the following:

- Project status reporting – City Reps, CM, Directors, Division Managers, User Departments
- Website for public access
- Quarterly Reports
- Recognition and Celebration of Successes

Recommendation 3.4.c: **Develop internal cross-functional process teams to work together among Divisions to develop new practices for internal communication and to initiate a training program.** The training will be on soft skills necessary to improve communication and shall be coordinated with the Chief Performance Officer. Training programs should cover the following areas at a minimum:

- Scheduling
- Crucial Conversations
- Presentation Skills
- Project Coordination between Departments
- Project Management

3.5 QUALITY CONTROL

All of the recommendations made within this evaluation should be deployed to appropriate staff who should be held accountable for completing and maintaining a desired level of quality. Quality Control (QC) is a fundamental process that must be an umbrella to all the process development. Below are several recommendations for implementing a Quality Program:

Recommendation 3.5.a: **Working with the Chief Performance Officer, develop a Quality Control system for providing direct responsibility and authority for Quality Control on the CIP project delivery.** Within this plan there should be a specific plan to include the QC process for overseeing the third-party program management firms.

Recommendation 3.5.b: **Working with Human Resources and the Chief Performance Officer, develop specific employee performance processes**. Processes should include at a minimum:

- Employee evaluation process with standard measures for performance specific to job roles and responsibilities
- Career planning, employee retention, and succession planning
- Employee salary structure and advancement processes

Recommendation 3.5.c: **Establish a Quality Control team that comprises staff across all departments involved in the delivery of capital projects.** This team will perform specific QC reviews on a project-by-project basis and will include results in the standard reporting process. The QC team will also have other project roles and will be a cross-functional team.

Recommendation 3.5.d: **Develop an independent design and constructability review process that includes specific checklists for documentation and use by third-party consultants.**

Recommendation 3.5.e: **Develop a document control system and process to maintain records and project data.** This system needs to be coordinated with the IT department to establish file storage on COEP network.

Recommendation 3.5.f: **Develop program metrics for monitoring schedules and budgets.** These metrics should be coordinated with the Chief Performance Officer to align with citywide metrics. Processes should be developed for establishing and monitoring warning and action limits.

Recommendation 3.5.g: **Review standard Architectural/Engineering selection documents and contract documents for design and construction and make necessary revisions.** Adopt updated documents upon review and approval from CID and Purchasing. Include standard construction phase services as part of the design contracts.

Recommendation 3.5.h: **Develop a utilities coordination team and standard process for coordination of franchise utilities and EPWU water and wastewater lines.**

Figure 3-1: Proposed City Organizational Chart

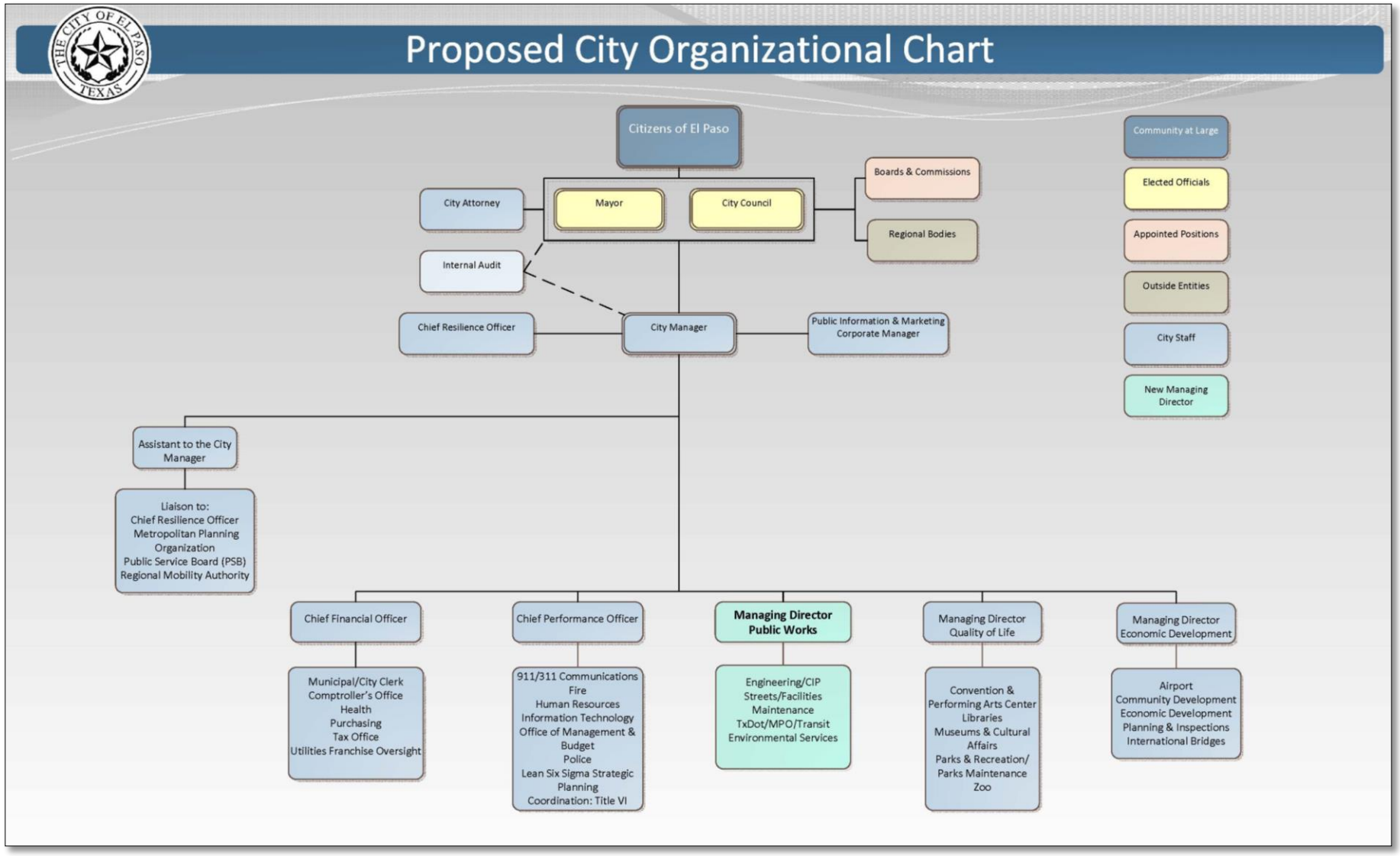
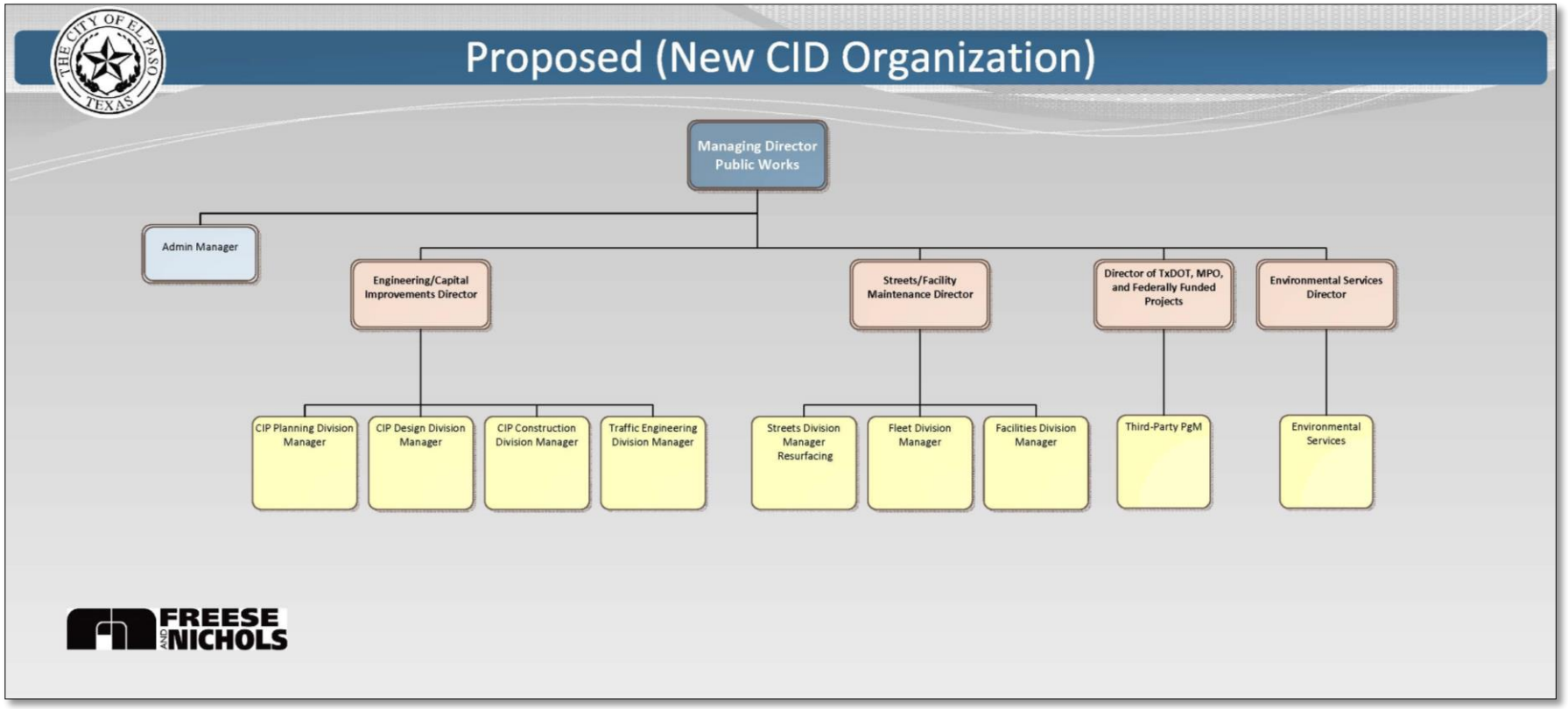


Figure 3-2: Managing Director of Public Works



4.0 90-DAY IMPLEMENTATION PLAN

Recommendations for improvements to the CID and delivery of the CIP have been made based on evaluation of available data and analysis as compared to best practices. Several of the recommendations will require long-term implementation. The 90-Day Implementation Plan, shown below, identifies specific actions that can be started immediately, upon approval of this evaluation report.

Action Item	Responsible Parties	Duration From NTP
4.1 Complete procurement process to hire a third-party for Design and Management of the TxDOT/MPO and Federal Projects	Purchasing CID	60 days
4.2 Procure third-party Program Manager to provide staff augmentation for CID and Program Management for Streets and Quality of Life programs.	CID	30-60 days
4.3 Implement the three process changes for Project Planning, Communication and Construction Change Management	CID	90 days
4.4 Use third-party Program Manager & CID Director to implement Management / Critical Staff Organization Effectiveness Recommendations (Section 3.1 & 3.2)	CID Director, PgM	60 days
4.5 Develop and implement an interim project reporting and tracking systems	CID	30 days
4.6 Implement changes identified in Communications recommendations (Section 2.3) for internal and external communications. This includes chain of command communications between CC Reps, CM Office, Executive Leadership CID and user departments	CID, CC, User Dept, Exec. Leadership	60-90 days
4.7 Complete an internal reconciliation of the project scope, schedule and budget for projects that are underway or are to be funded in 2016 and update FY2016 budget as necessary. Include Architectural/Engineering services, project escalation, O&M, contingency and construction phase services	CID, User Dept.	30 days
4.8 Develop an interim communication plan and communicate actions internally, externally and with CC Reps	CID	60 days
4.9 Engage the Engineer and Architect of Record for construction phase services on an hourly basis to address construction issues and complete projects	CID	30 days
4.10 Dedicate a city liaison between the Public Works organization and EPWU	CID	60 days